



## FLEAS (and TICKS) & FLEA CONTROL

Fortunately for our pets, pet owners now have more choices and more quality products than ever for controlling and eliminating fleas.

But before you try yet another new “miracle” flea product that you’ve heard about on TV or from a friend, it’s important to understand fleas and their life cycle in order to effectively treat them. First, realize that there are 4 parts to a flea’s life cycle:

- 1) **Adult Fleas** ... which lay ...
- 2) **Eggs** ... which hatch into a ...
- 3) **Larva** ... which spins itself into a ...
- 4) **Pupa / Cocoon** ... from which the Adult flea emerges to start the cycle all over again

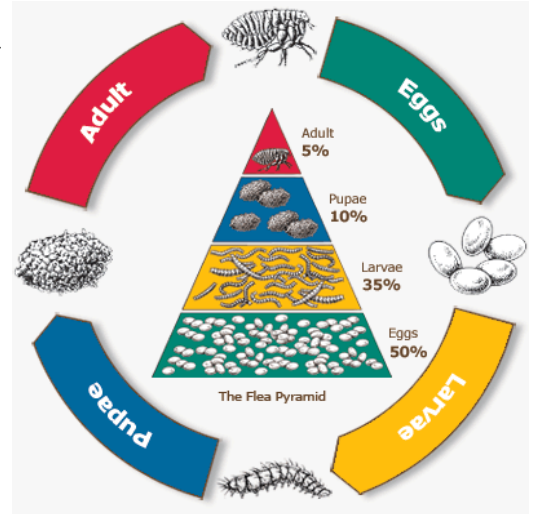
I know you must be thinking, “OK, Dr. Bob, why in the world should I care about the flea life cycle? What’s the big deal ??? I just want to get rid of these doggone pesky fleas !”

How about if I told you that in a flea’s life cycle, only a very small percentage of time is spent in the adult flea stage. With ~95% of the time (see chart to the right) spent in the 3 other stages of development, wouldn’t it make sense to treat and eliminate the other parts of the life cycle to get firm control over the problem? You bet it would.

How will we do that? First, we have to start at the source.

By that, I mean that **we want to aggressively eliminate fleas before they have a chance to jump on our pets in the first place.** If you wait until fleas have already infested your dog or cat before you decide to attack the problem, then the workload of getting rid of fleas from the environment becomes much more difficult.

So where is this source of fleas? Simply step outside into your yard or neighborhood !



### STEP 1 - TREAT THE OUTDOOR PREMISES (The Yard)

Pets first pick up fleas outside, so if we target the areas where our pets spend time outdoors, we will solve a lot of the flea problems we see. Treating for fleas outside may not always be possible (for instance, if you live in an apartment complex or you live on several acres of land). And sometimes it’s just not a good idea at all (if you raise chickens, etc). But **if it’s possible, you must make an effort to eliminate fleas before they get onto your pet.**

I have found good success with **Spectracide’s Triazicide Insect Killer** which comes in a liquid or granules, and is available at lawn & garden centers. For best results, I recommend rotating different products rather than using the same one over and over to keep fleas and other insects from developing resistance. And absolutely the most important thing about treating the yard (listen up, Guys !) is to **READ DIRECTIONS** on the product label before applying.

One other thing: be aware that fleas prefer shady yards more than a yard in full sun. So if you have lots of shade, you’ll need to be more aggressive with your treatment of the yard. And keeping the grass cut helps makes a difference, too.

### STEP 2 - TREAT INSIDE THE HOUSE

**The most important thing to know about treating the house is to treat 2 times. The 2nd treatment must be 2 to 3 weeks after the first treatment.** The reason for this gets back to the flea life cycle. While there are several products that kill fleas, flea eggs and flea larvae, there are no effective products that kill flea pupae (cocoons) since they are bundled up in a protective cover. So the 2nd treatment is necessary to kill the new fleas that have just emerged from the pupa.

To treat hardwood, tile or vinyl floors, vacuuming thoroughly can be effective. Carpeted areas (and rugs) need more attention, however. It’s important to **use a spray that you apply directly to infested areas.** And just like treating your yard, it’s best to rotate treatment with different products.

Before treating your home, put your vacuum cleaner to work. The vacuum will either suck up the flea pupae (with fleas still developing in them), or the *vibration* will actually stimulate adult fleas to hatch from the pupa / cocoon stage. Be sure to remove the vacuum cleaner bag and dispose of it in an airtight container outside of your home. If you have a bagless vacuum, empty the contents into an airtight container and put it in the garbage can outside, and then clean the container outside with soapy water.

Wait a couple of hours after vacuuming, then aggressively treat the house using a spray while going room-to-room to treat. It’s crucial to treat those hard-to-get-to areas; lift up sofa and chair cushions and spray thoroughly; spray under furniture; remove the sheets from beds and wash them, then spray around and under the bed thoroughly. You get the idea. While treating the house, it’s best to keep your pets in the kitchen or a utility room away from the spray.

**Wait 2 to 3 weeks, then repeat the treatment.**

I have not had personal experience treating a house, but I might suggest Adams PLUS Flea & Tick Carpet Spray, or HotShot Bedbugs & Fleas.

But, please ... **Do NOT rely on foggers/ flea bombs, unless you are treating an empty (or nearly empty) room.** Think about it. A fogger simply sprays a mist (fog) into the air. The mist from a fogger will only cover exposed surfaces. **It will not penetrate** into the areas where fleas, flea eggs and larvae will be. The mist from a fogger will land on tops of furniture, the TV, etc. But fleas and flea eggs aren’t on top of the furniture, TV, etc, so why treat these areas ?

### STEP 3 - TREAT YOUR PETS

With so many choices for treating our pets nowadays, how do you choose from all the available products ???

First, let's look at traditional methods:

- 1) Flea Sprays—can be messy; they're loaded with alcohol (which will sting if either you or your pet have sores on the skin); pets generally don't like them; and with a couple of exceptions, they only last a couple of hours
- 2) Flea Shampoos—they're helpful to kill fleas and wash off flea eggs and larva, and help relieve your pet's skin, BUT when you rinse them off, you wash the insecticide down the drain ! Once your pet is dry, fleas will jump right back onto your pet
- 3) Flea Collars—worthless ! (although there are some collars just for Ticks that are very effective against ticks)

#### Now, what about some of the newer products

1) **Activyl Topical Liquid (Dogs and Cats) ... Activyl TickPlus (Dogs only)** - This is the newest once-a-month topical liquid created for both dogs and cats. So, what makes this product different from Frontline and Advantage and a host of copy-cat generic products ? Plenty ! First, it has an active ingredient that is unlike any other product on the market, so there are no concerns about fleas being resistant to the product. Second, there is no evidence of any toxicity in pets or humans. And third, Dr. Michael Dryden, the world's foremost authority on fleas, has repeatedly tested Activyl on a colony of 'super-fleas' that he has created, and Activyl's effectiveness in killing these super-fleas was outstanding ! Activyl is not a flea repellent, so fleas must get on your pet before they will die, and even then, they will not die immediately. Be patient. Ideally, pets should not be bathed a day before or a day after applying Activyl in order to insure that the product covers your pet thoroughly. Activyl is quite liquid and goes away pretty quickly once it is applied.

For dogs only, we also offer **Activyl TickPlus** formulation that combines flea control plus tick control. Because of the chemical ingredient to kill ticks, it will leave a more oily residue to your pet's fur than Activyl alone.

2) **Comfortis Tablets (Dogs and Cats)** - This once-a-month tablet does an excellent job of killing fleas, starting in only 30 minutes. It's a great choice for dogs that swim a lot, pets with persistent dry skin, or where pet owners are reluctant to apply the topical products because of young children in the house, etc. It does NOT kill ticks, or flea eggs or larva.

3) **Trifexis Tablets (Dogs only)** - Trifexis contains the same active ingredient as Comfortis to kill fleas, but has the added benefit of providing Heartworm prevention as well as treating and controlling 3 intestinal worms (Hookworms, Roundworms and Whipworms). It is given as a monthly pill. It is not labeled to kill ticks, or flea eggs or larva.

4) **Sentinel (Dogs Only)** - This once-a-month tablet combines heartworm prevention; treatment and control of whipworms, roundworms and hookworms; and prevents flea eggs from hatching. It does NOT kill adult fleas or ticks!

5) **Capstar (Dogs and Cats)** - For a fast and very effective way to kill fleas, Capstar can be a valuable product. And it's safe for both puppies & kittens. The big limitation is that it only works for ~24 hours (1 day).

6) **Revolution** - For Cats, we see great results with Revolution, another topical liquid. Additionally, Revolution prevents Heartworm disease and treats Roundworms and Hookworms. And it even treats and controls Ear Mites. Revolution works by getting absorbed into the skin to work inside the body, so we avoid using it on cats that are in poor health.

There are plenty of other, similar products available, but we have chosen what we believe to be the best of what's available for your pets. There is NO single BEST product out there. Each one has its benefits and limitations.



#### FLEA FAQ'S

##### What are the ideal conditions for fleas to thrive and reproduce ?

For fleas to develop and reproduce, they require 3 conditions:

- 1) Humidity - That's a given here in the Carolinas throughout the summer months
- 2) Heat (But not too much) - Fleas actually prefer temperatures that are in the mid- to upper-80's, not the 90's
- 3) Moisture - A crucial need for fleas is the right amount of rainfall. If the weather is really hot and really dry, our flea problems are not nearly as bad as when we have lots of mid-to-upper 80 degree days with occasional rain and storms.

##### What is the peak season when fleas are at their worst ?

Autumn ! Most pet owners think the flea season is at its peak in the summer months, but here in the Carolinas, the worst time of year for fleas is typically in September, October and into November. So don't stop treating for fleas until late in the year !

##### When does the flea season begin ?

Most years, we start seeing fleas in May, a few more in June and July, even more in August, and that all leads up to the usual busy Autumn season for fleas. Of course, we sometimes see pets with fleas year-round, if owners have not treated the house !

##### When will the flea season end ?

Fleas will continue to live outdoors until we get a hard, killing frost, which usually occurs between Halloween and Christmas. You'll know it's a killing frost when you see outdoor vegetation limp and lifeless following a hard freeze. Indoors, fleas can live year-round, although lower humidity in our homes in the winter months slows down their activity and reproduction.

**What about the tick season ?** We start seeing ticks as early as February, and they peak in June-July. Their numbers fall off quite a bit in August, and we seldom see ticks in the autumn months.